**Mini Project: Transformational Artwork** Create an inspiring piece of art…

Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ …and transform it across the plane!

**Step 1**: Create an image of your choice *in the 1st quadrant* of the coordinate plane.

* Your can create any image you want, but it must be *appropriate* **and** *approved by Rodriguez*.
* There must be *10 or more labeled points/coordinates* visible in your figure. (Don’t have more than 26!)
* You must *use a ruler/straightedge to connect any straight segments*.

**Step 2**:

* Write the coordinates of the 10 or more labeled points/coordinates from step 1 on the coordinate tracking handout.
* Label the 10 or more points on the graph as A, B, etc.

**Step 3**: Rotate your picture 90 degrees counterclockwise.

* Write the new coordinates on your coordinate tracking handout.
* Don’t forget to label the new points on the graph as A’, B’, etc.

**Step 4**: Reflect the image from step 3 across the x-axis.

* Write the new coordinates on your coordinate tracking handout.
* Don’t forget to label the new points on the graph as A’’, B’’, etc.

**Step 5**: Translate the image from step 4 so that it ends up in the 4th quadrant.

* Write the translation rule and the new coordinates on your coordinate tracking handout.
* Don’t forget to label the new points on the graph as A’’’, B’’’, etc.

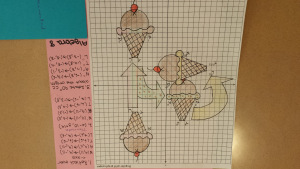
**Step 6**: Dilate your original image (from step 1) using a scale factor of 1.5.

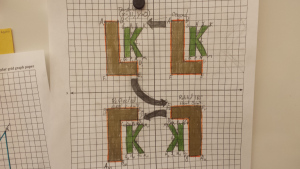
* Write the new coordinates on your coordinate tracking handout.
* Don’t forget to label the new points as A’’’’, B’’’’, etc.

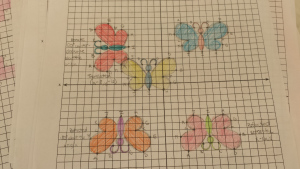
***…and you’re done! Isn’t your work beautiful?* ☺ ☺ ☺**

**SAMPLES:**

**(note – the sequence of transformations is different here)**

[](https://pperfectsquares.files.wordpress.com/2014/06/2014-05-30-13-29-351.jpg)

[](https://pperfectsquares.files.wordpress.com/2014/06/2014-05-30-06-49-36.jpg)

[](https://pperfectsquares.files.wordpress.com/2014/06/2014-05-30-06-50-31.jpg)